Supporting Document 1 Item No. 16

Staff Report for

Item No. 16
Discussion
January 16, 2003

To: John H. Robertus Executive Officer

From: Paul J. Richter Water Resource Control Engineer Industrial Compliance Unit

Tentative Order No. R9-2003-0005 NPDES Permit No. CA0109134 WASTE DISCHARGE REQUIREMENTS FOR NATIONAL STEEL AND SHIPBUILDING COMPANY

DISCUSSION:

National Steel & Shipbuilding Company (NASSCO) is an existing full service ship construction, modification, repair, and maintenance facility located on the eastern waterfront of central San Diego Bay in San Diego, California. Operations at NASSCO generate or have the potential to generate discharges of waste to San Diego Bay. The waste discharges may cause a short-term loss of designated beneficial uses of the receiving water. The discharges may include industrial process water and/or storm water contaminated with abrasive blast material, paint, oils, lubricants, fuels, or solvents.

NASSCO is currently regulated by Order No. 97-36, NPDES Permit No. CAG039001, a general permit (General Shipyard Permit) that regulates discharges from ship construction, modification, repair, and maintenance facilities and activities in the San Diego Region. Other shipyards regulated by Order No. 97-36 include Southwest Marine, Inc. (SWM), and Campbell Industries. Order No. 97-36 expired on October 15, 2002, but the requirements remain in effect until a new NPDES permit is adopted by the Regional Board.

On April 16, 2002 NASSCO submitted a *Report of Waste Discharge* (RWD) for a *National Pollutant Discharge Elimination System* (NPDES) Permit. Tentative Order No. R9-2003-0005 is an individual NPDES permit that is specifically written for the operational, structural, and discharge conditions at the NASSCO facility. The tentative Order includes the numerous operational and structures changes in the facility that have taken place since adoption of the General Shipyard Permit in 1997. NASSCO is a major NPDES discharger.

Point Source

The *point source* discharges at NASSCO are Fire Protection Water Systems; Hydrostatic Relief Water; Floating Drydock Deballasting; Flood Dewatering; Graving Dock Caisson Deballasting; and Pipe and Tank Hydrostatic Test water. The discharges are from various locations and are grouped and identified as follows:

- 1. Fire Protection Water Systems:
 - a. Berth II (FP-1),
 - b. Berth V (FP-2),
 - c. Berth X (FP-3),
 - d. Ways 3 (FP-4),
 - e. Floating Drydock (FP-5);
- 2. Hydrostatic Relief Water:
 - a. Graving Dock (HR-1),
 - b. Ways 3 (HR-2),
 - c. Ways 4 (HR-3);
- 3. Floating Drydock Deballasting (M-1);
- 4. Floodwater Dewatering:
 - a. Graving Dock (M-2),
 - b. Ways 3 (M-3),
 - c. Ways 4 (M-4);
- 5. Hydrostatic Testing Water-New Vessels (M-5);
- 6. Graving Dock Caisson Deballasting (M-6); and
- 7. Pipe and Tanks Hydrostatic Test Water (M-8).

Descriptions of the point source discharges are included in the Fact Sheet for the tentative Order. As explained in the *Point Source Discharge* section, the point source discharges, other than industrial storm water runoff, can be considered to be innocuous because of the nature of the discharges or the volume of the discharges. If a significant or material change occurs in the discharges (i.e. chemical concentrations, physical properties, location, volume, or frequency), the potential impact to beneficial uses may change or cause a violation of the Order No. R9-2003-0005. Any change in either the nature or volume of the discharges can be readily identified and evaluated through the monitoring requirements specified in *Monitoring and Reporting Program No. R9-2003-0005*.

For the purpose of the *Bays and Estuaries Policy* and Order No. R9-2003-0005, the discharge of the wastes listed above and the waste discharges conditionally regulated (as listed below) will be considered innocuous nonmunicipal wastewaters and, as such, will not be considered industrial process wastes.

Waste discharges included in the tentative Order, but not currently discharged, and, which are conditionally regulated by the tentative Order include the following:

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- 1. saltbox water;
- 2. steam condensate;

- 3. compressor and condenser non-contact cooling water;
- 4. shipbuilding ways gate and wall leakage;
- 5. graving dock caisson leakage and wall leakage water;
- 6. floating drydock sump water; and
- 7. graving dock sump pump test water.

NASSCO must notify the regional Board when the conditionally regulated discharges occur and must sample and analyze the discharges for priority pollutants pursuant to the Implementation Policy.

Monitoring for Additional Data for a Reasonable Potential Analyses for Priority Pollutants Pursuant to the Implementation Policy

The tentative Order requires additional monitoring of copper, zinc and nickel for the discharges of fire protection water (FP-1, FP-2, FP-3, FP-4, and FP-5), hydrostatic relief (HR-1, HR-2, and HR-3).

Monthly sampling for copper, zinc, and nickel will be required at the effluent discharge point and the receiving water for a maximum two-year period. Once adequate data has been submitted, Regional Board staff will conduct a *Reasonable Potential Analysis* (RPA) to determine if effluent limitations are needed for copper, nickel, and/or zinc. If the RPA identifies a need for effluent limitations, staff will calculate limitations using procedures specified in Section 1.4 of the Implementation Policy. Pursuant to Section 1.4.4 of the Implementation Policy, staff will also determine if intake water credits can be granted during establishment of these effluent limitations. Order No. R9-2003-0005 may be re-opened at a later date to incorporate the results of this analysis.

Industrial Storm Water

NASSCO operates and maintains a Storm Water Diversion System (SWDS). The diversion system is designed to capture all storm water runoff from all industrial areas. NASSCO developed the SWDS to eliminate the discharge of industrial storm water. NASSCO's storm water retention capacity exceeds 33,858,000 gallons, more than enough capacity to capture a 100-year storm event (approximately 3.5 inches of rain in 24 hours).

In the summer 2001, a storm water filtration system was installed at NASSCO at catchment basin #8 (See Supporting Document 5, Figure 2, Facility Plot Plan). The filtering system is manufactured by *Storm Water Management Inc.*, and uses a proprietary leaf litter media to filter the industrial storm water. The filtration system is a pilot project designed to cause the industrial storm water to achieve a 90% survival rate. To date, the discharge from the industrial storm water filtration system has not consistently achieved a 90% survival rate. The last wet weather season, 2001-2002, had few storm events that produced significant rainfall runoff to fully test the pilot system. The filtered storm water has been captured and diverted to the sanitary sewer system. The storm water filtration system may be tested again this year.

Availability of the tentative Order

The tentative Order was mailed on December 17, 2002, 50 days prior to today's meeting.

Comment letters

Staff received a comment letter dated November 27, 2002 from the *San Diego Bay Council* for the previous version of the tentative Order, Order No. R9-2002-0175, which had been scheduled for the December Regional Board meeting. Because the Union Tribune failed to publish the notice for the meeting, the Regional Board did not consider R9-2002-0175 at its meeting. Subsequently, the tentative Order was slightly modified and renumbered as Order No. R9-2003-0005. The tentative Order was mailed to the discharger and interested parties on December 17, 2002. As of January 21, 2003 staff has not received any comments for the tentative Order. By memorandum dated January 21, 2003, staff has responded to the comments from the San Diego Bay Council.